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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,995	02/20/2004	Robert S. Whitehouse	14074-014001	4368

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EXAMINER
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RONESI, VICKEY M

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/783,995	<b>Applicant(s)</b> WHITEHOUSE, ROBERT S.	
	<b>Examiner</b> Vickey Ronesi	<b>Art Unit</b> 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-82 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-82 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/23/04, 6/24/04</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 8/23/2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner. Note that the following cited references have been stricken from the IDS since no English-language abstract or translation was provided and no reference was made to said references in applicant's specification: DE 44 30 415, DE 43 00420

### ***Claim Objections***

2. Claims 19, 36-43, and 75-77 are objected to because of the following reasons:

With respect to claim 19, the word "or" in the second line is redundant and should therefore be deleted.

With respect to claims 36-43 and 75-77, the molecular weight lacks basis, i.e., is it weight-average molecular weight or number-average molecular weight?

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 30-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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With respect to claims 30-35, there is no basis for the amount of either the first or second PHA, i.e., it is not made clear if the amounts are only relative to the amount of the PHA polymers in the blend or includes other polymers, fillers, etc (see instant claim 81).

***Claim Rejections - 35 USC § 102/103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-40, 43-49, and 52-81 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Liggat (US 5,693,389).

Liggat discloses a polyester composition comprising a first PHA and a second PHA which has a crystalline melting point is at least 5°C higher than the crystalline melting point of the first PHA, wherein the first and second PHAs can be the same or different and which are homopolymers or copolymers (col. 1, line 48 to col. 2, line 47). The composition comprises from 0.1-20 wt % of the second PHA (col. 2, lines 48-51) and is used in adhesive compositions (col. 5, line 16).

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Liggat does not expressly disclose the glass transition temperature or Hansen solubility of its PHAs, nevertheless, given that the copolymers of Liggat are the same utilized in the present invention, they would therefore inherently exhibit the presently claimed properties since a material and its properties are inseparable. Moreover, while Liggat does not disclose the properties of its blend composition such as deformation angle tolerance, stiffness, and peel bond strength, these properties are considered to be inherent given that Liggat teaches that beneficial mechanical properties are obtained (col. 1, line 16) and further given that Liggat discloses the presently claimed ingredients in the blend composition. Case law holds that a material and its properties are inseparable. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

In light of the above, it is clear that Liggat anticipates the presently cited claims.

To the extent that Liggat does not explicitly disclose the presently claimed properties, it is considered that it would have been obvious to one of ordinary skill in the art to obtain a composition with said properties given that they are intrinsic and thereby arrive at the presently cited claims.

5. Claims 1-37, 44-73, and 78-82 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hammond (US 5,646,217).

Hammond discloses a polymer composition comprising a first polyester component containing PHA which is either a homo- or copolymer containing more than 2 monomers (col. 1, lines 32-55) and a second polyester component containing a similar or different PHA from the first PHA (col. 2, lines 13-47), wherein each component is present in an amount of 5-90 wt % by

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weight of the composition (col. 3, lines 6-10). The polyester components are either compatibilized (i.e., miscible or partially miscible) (col. 5, lines 19-28) or not compatibilized (i.e., immiscible) (col. 3, line 66-67). Exemplified compositions include PHA copolymers of hydroxybutyrate and hydroxyvalerate and a homopolymer of polyhydroxybutyrate having a Mw of 558,000 (col. 6, line 18).

Hammond does not expressly disclose the glass transition temperature or Hansen solubility of its PHAs, nevertheless, given that the copolymers of Hansen are the same utilized in the present invention, they would therefore inherently exhibit the presently claimed properties since a material and its properties are inseparable. Moreover, while Hansen does not disclose the presently claimed properties of its blend composition such as deformation angle tolerance, stiffness, and peel bond strength, these properties are considered to be inherent given that Hansen teaches that beneficial mechanical properties are obtained (col. 3, lines 60-61) and further given that Hammond discloses the presently claimed ingredients in the blend composition. Case law holds that a material and its properties are inseparable. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

In light of the above, it is clear that Hammond anticipates the presently cited claims.

To the extent that Hammond does not explicitly disclose the presently claimed properties, it is considered that it would have been obvious to one of ordinary skill in the art to obtain a composition with said properties given that they are intrinsic and thereby arrive at the presently cited claims.

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6. Claims 1-8, 30-49, 52-56, 59-63, and 79 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Doi et al (US 5,191,037).

Doi et al discloses a biodegradable polymeric composition which provides for a flexible article (abstract) comprising 100 parts by weight (pbw) of a first polyhydroxybutyrate having an exemplified Mw of 652,000 (col. 6, line 26) and a second polyhydroxybutyrate copolymer (col. 2, lines 23-57) having an exemplified Mw of 47,000 (col. 6, lines 13-15), wherein the blend is completely miscible (col. 5, lines 27-30).

Doi et al does not expressly disclose the glass transition temperature or Doi et al solubility of its PHAs, nevertheless, given that the copolymers of Doi et al are the same utilized in the present invention, they would therefore inherently exhibit the presently claimed properties since a material and its properties are inseparable. Moreover, while Doi et al does not disclose the presently claimed properties of its blend composition such as deformation angle tolerance, stiffness, and peel bond strength, these properties are considered to be inherent given that Doi et al discloses improved mechanical properties (abstract, Table 1) are obtained and further given that Doi et al discloses the presently claimed ingredients in the blend composition. In re Spada In light of the above, it is clear that Doi et al anticipates the presently cited claims.

To the extent that Doi et al does not explicitly disclose the presently claimed properties, it is considered that it would have been obvious to one of ordinary skill in the art to obtain a composition with said properties given that they are intrinsic and thereby arrive at the presently cited claims.

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***Contact Information***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8/22/2005

vr



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